Operations Guide

- **Preface**
  - ↗ Show up 15 minutes before your shift so previous shift can leave on time, especially the owl shift
  - ↗ Phone etiquette: "This is Dee Hahn, the CDF Training Coordinator, in the CDF Control Room. Who is speaking, please?"
  - ↗ E-log etiquette: write down <u>your name</u>, not "DAQ Ace" or some such, when you make an entry, so if someone has a question they can find you
  - ↗ On shift, you take your meals in the control room, not in the B0 kitchen or outside the building
  - ↗ If you swap shifts, swap must be approved by Dee, and all involved parties must receive e-mail
  - ↗ If you are going to be late to shift or you are sick, call the control room or Dee
  - ↗ Make sure your safety training is current before starting shifts (Dee or the Ops Managers can check your training)
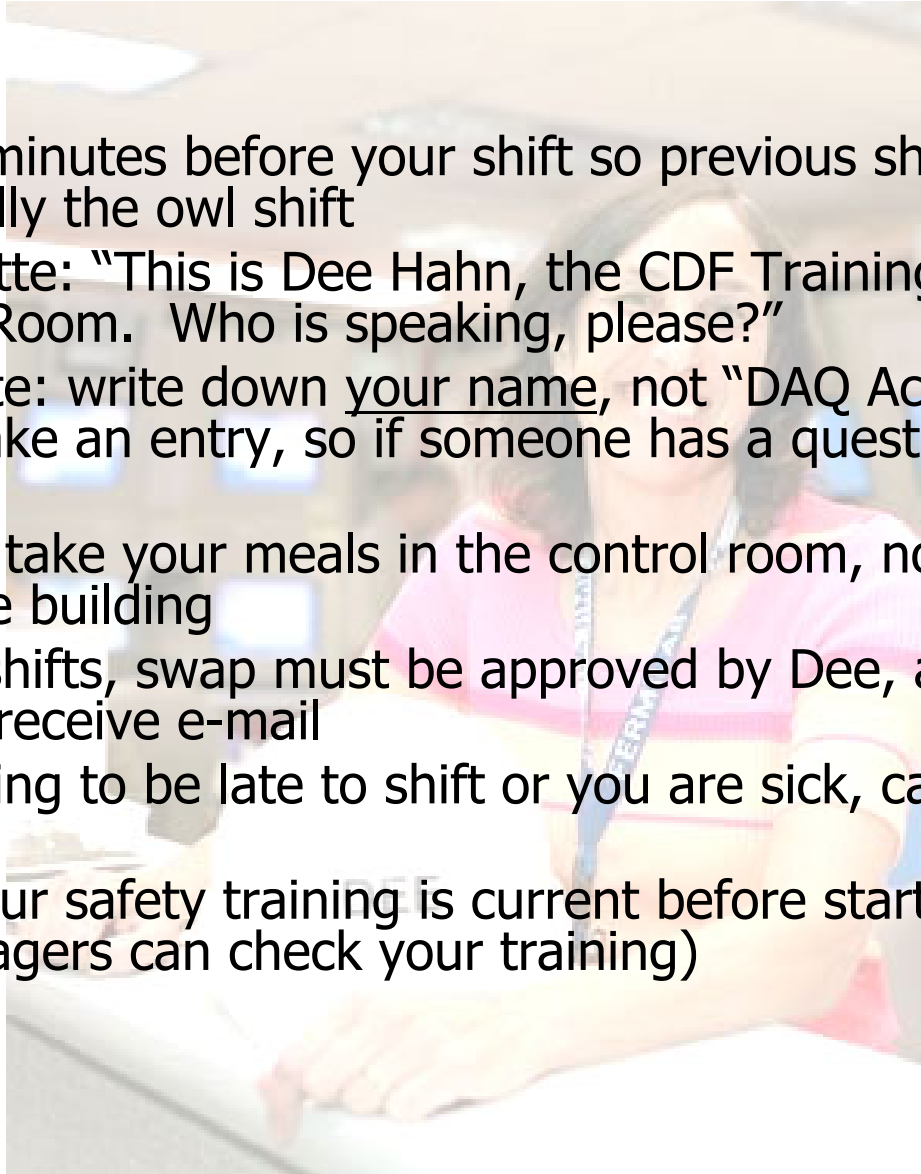
Operations Guide

- **CDF Operations Guidelines**
  - ↗ Defines roles and responsibilities of shift crew and supporting personnel
  - ↗ During data-taking running, 24/7 operations with on-shift crew (in control room):
    - Scientific Coordinator (SciCo) – shift leader
    - DAQ Ace – data-taking
    - Monitoring Ace – safety and data quality
    - Consumer Operator – data quality

    > Two aces per shift generally swap alternate days

  - ↗ 24 hour support from process systems technicians downstairs in cryo area (x3632) – current tech(s) on main iFIX page

2

Shift Support

↗ Other off-shift support (most with pagers or cell phones) for shift crew:
- Operations manager
- SVX radiation damage control officer (RadCo)
- DAQ experts
- CDF Mechanical Group, CDF Detector Group
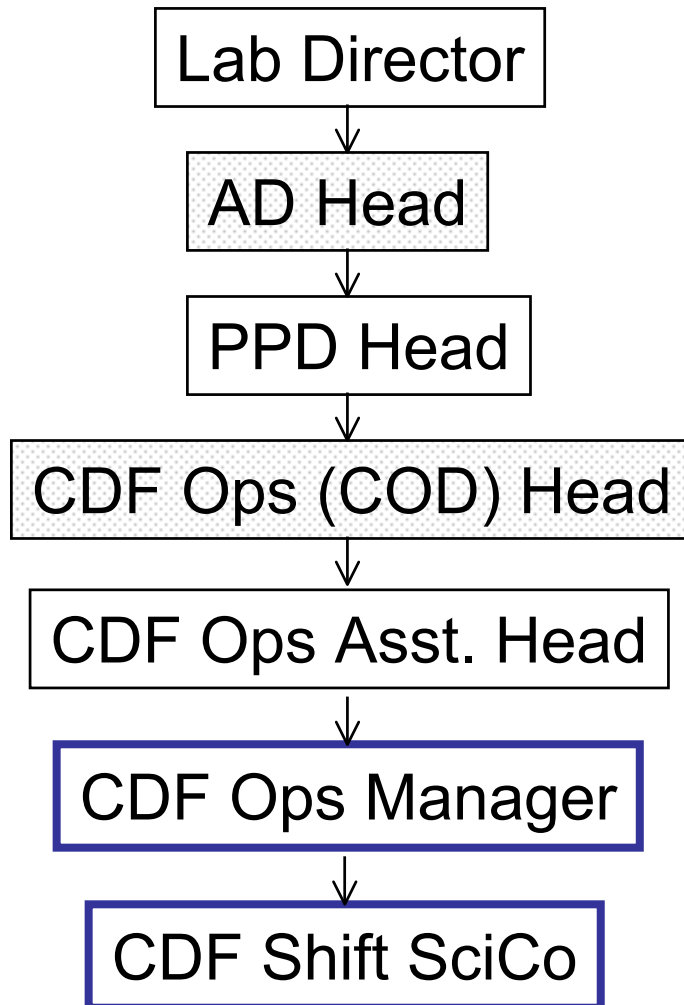- CDF Offline Group
- Etc. etc. etc.

↗ Long list of pagers
- Latest version on web: http://www-cdfonline.fnal.gov/ace2help/phones.html
- Paper copies around the control room
- Keep calling until you get help; call all numbers listed (not everyone sleeps with their pager or cell phone)
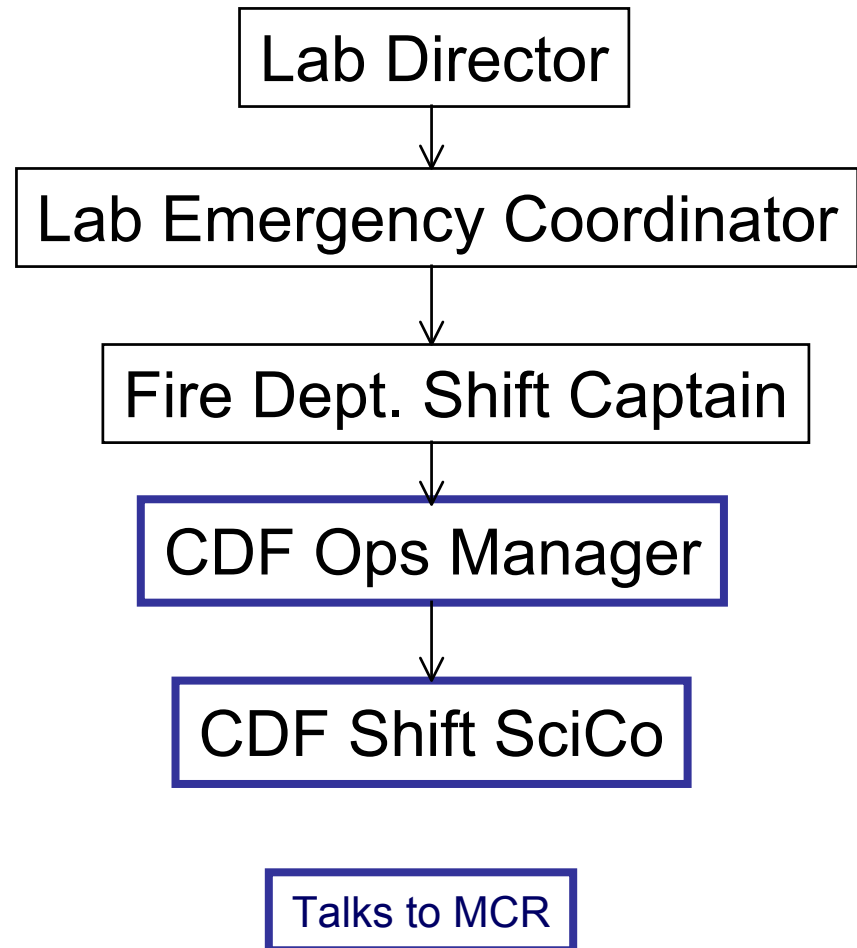
3

Chain of Command

Normal Operations

Lab Director

↓

AD Head

↓

PPD Head

↓

CDF Ops (COD) Head

↓

CDF Ops Asst. Head

↓

CDF Ops Manager

↓

CDF Shift SciCo

Emergency Situation

Lab Director

↓

Lab Emergency Coordinator

↓

Fire Dept. Shift Captain

↓

CDF Ops Manager

↓

CDF Shift SciCo

Talks to MCR

4

CDF II

Operations Group

Detector and Computing Operations
Head Michael Lindgren
Deputy Head Rob Roser
Deputy Head Rob Harris

Admin. Support
Nancy Michael

Safety Coordinator
Dee Hahn

Associate Head, Computer Infrastructure
Frank Wurthwein

- **Data Handling**
  Jeff Tseng
- **Farms**
  Steve Wolbers
  Yen-Chu Chen
- **Central Analyis Systems**
  Mark Neubauer
- **Data Bases**
  Alan Sill(Deputy)
- **Trailer Computing**
  Robert Harris
  Frank Wurthwein

Associate Head, Detector Operations
Kaori Maeshima

- **Operations Manager**
  Eric James
  Mathew Jones
  Phil Koehn
- **Daily/Weekly Ops**
  Shift Crews
  Sci-Co
  Aces(2)
  Co
- **Calibrations**

Offline Operations
Pasha Murat

- **Offline Aces**
- **Offline shift crews**

Associate Head, Detector Subsystems
Jimmy Proudfoot

- **Silicon**
  Gino Bolla
  Chris Hill
- **COT**
  David Ambrose
  Bill Orejuos
  Bob Wagner
- **Muons**
  Camille Ginsburg
  Phil Schlabach
- **CLC**
  Jaco Konigsberg
  Sacha Suhkanov
- **Monitoring/Valid**
  Kaori Maeshima
- **Calorimeters**
  Karen Byrum
  Larry Nodulman
  Willis Sakumoto
- **Trigger L1/L2**
  Greg Field
  Peter Wittich
- **Online Database**
  William Badgett
- **TOF**
  Gerry Bauer
  Mathew Jones
  Fumihiko Ukegawa
- **DAQ**
  Frank Chlebana
  William Badgett
- **Level 3**
- **CSL**
  T. Vaiciulis

Associate Head, Detector Infrastructure
Stefano Moccia - Steve Hahn

- **Process Systems**
  Bill Noe(Leader)
  Dean Becker
  Warren Bowman
  Cutchlow Cahill
  Steve Gordon
  Jim Humbert
  Jim Loskot
  Bruce Vollmer
- **Electrical and Mechanical**
  Dervin Allen(Leader)
  Roberto Davila
  Lew Morris
  Wayne Walden
  George Wyatt
- **Slow Controls**
  Steve Hahn(Leader)
  JJ Schmidt
  JC Yun
- **Building Manager**
  Craig Olson

5

Operations Group

- Head –Rob Roser, Carl Bromberg
- ES&H Head – vacancy
- Associate Head – Camille Ginsburg, Kaori Maeshima
- Training – Dee Hahn
- Operations Managers:
  - ↗ Rotation (every week, usually seven days):
    http://www-cdfonline.fnal.gov/opshelp/ops_manager.html
  - ↗ Active ops manager has
    - pager (314-4862)
    - cell phone (846-0600); usually only for outgoing calls
  - ↗ Current ops managers:
    - Mary Convery
    - Robert Harr
    - J.J. Schmidt
    - Steve Hahn (emeritus) – cell phone (399-0135)

6

Shift Roles

- **Operations Associate Head**
  - ↗ Sets priorities and goals for run
  - ↗ Maintains Run Plan
  - ↗ May act as Ops Manager if needed

- **Ops Manager**
  - ↗ Shift priorities
  - ↗ Runs daily operations meeting
  - ↗ Posts daily run plan
  - ↗ Coordinates shutdowns/accesses
    - Ops Manager MUST be contacted before any access
  - ↗ Liaison to AD; attends AD meetings
  - ↗ Reports to All Experimenters' meeting

Shift Roles

- **Scientific Coordinator (SciCo)**
  - ↗ Communicates with MCR
  - ↗ ERP implementation
  - ↗ Heads shift
  - ↗ Daily Operations Meeting shift summary
  - ↗ Shift resource allocation
  - ↗ Maintains logbook
  - ↗ Maintains goodrun list
  - ↗ Helps maintain downtime logger
- **Both Aces**
  - ↗ Assist ERP implementation
  - ↗ Enter information in logbook

8

Shift Roles

- DAQ Ace
  - ↗ Runs data acquisition and calibrations
  - ↗ Assist other DAQ users
- Monitoring Ace
  - ↗ Investigates alarms, assists in recovery procedures
  - ↗ Monitors CDF Infrastructure systems (flammable gas, cryogenics, Suva™, silicon cooling, rack protection, LCW, ECW, HVAC) through iFIX
  - ↗ "Takes preemptive actions to minimize experiment down time"
  - ↗ Monitors data quality
  - ↗ Monitors beam conditions from Acnet and TeVmon
  - ↗ Maintains downtime logger
  - ↗ Assists consumer operator
  - ↗ Fills out shot setup form

9

- Consumer operator
  - Runs and checks data monitors
    - online consumers
    - calibration results
  - Notifies SciCo and appropriate personnel of problems